

Supplementary Materials

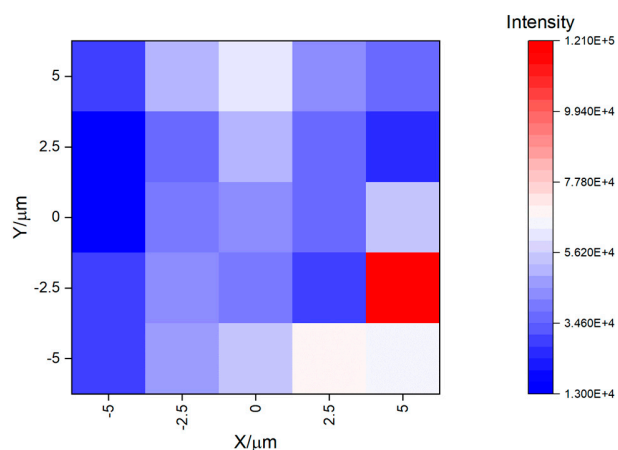
Plasmonic enhanced SERS in Ag/TiO₂ nanostructured film: an experimental and theoretical study

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Figure S1: Mapping of the Raman intensity of the two peaks located at 480 and 1623 cm⁻¹.

➤ Mapping of 480 cm⁻¹



➤ Mapping at 1623 cm⁻¹

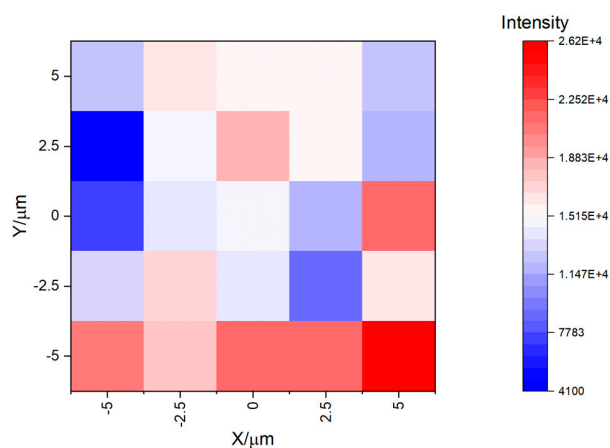
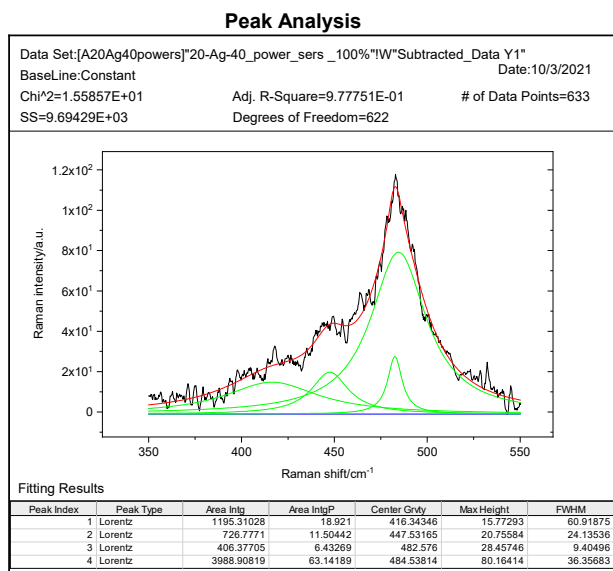
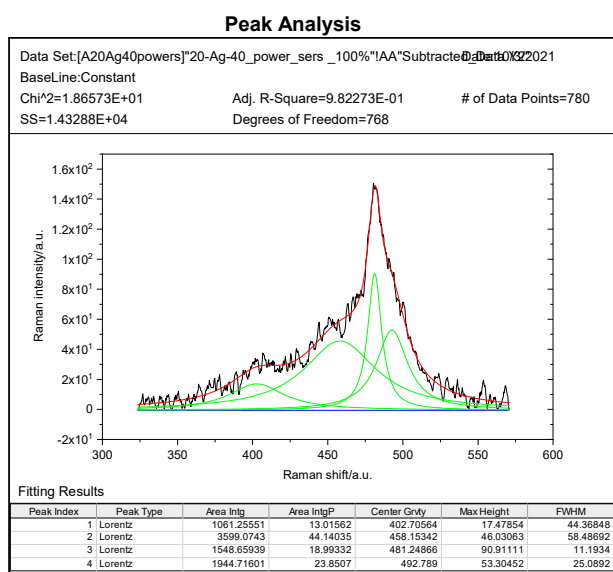


Figure S2: Fitting of Raman line located at 480 cm⁻¹ excited at different power density.

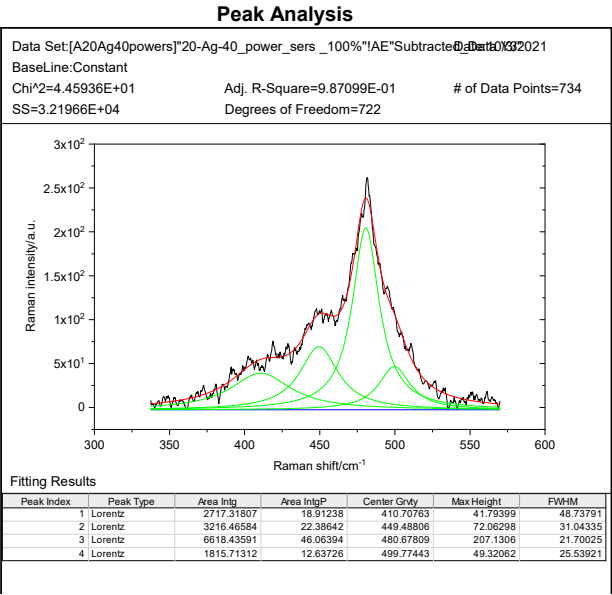
➤ 5%



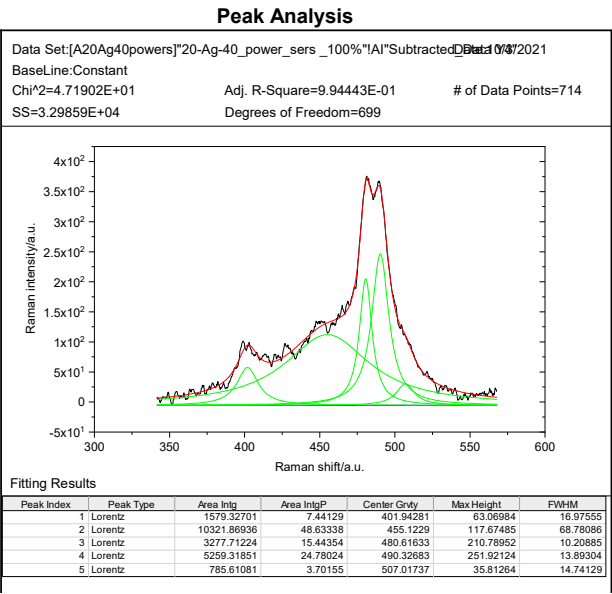
➤ 10%



➤ 25%



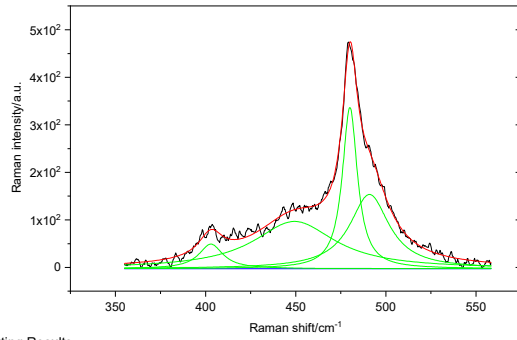
➤ 50%



➤ 100%

Peak Analysis

Data Set:[A20Ag40powers]*20-Ag-40_power_sers_100%"IAM"Subtracted Data
BaseLine:Constant
Chi²=6.78860E+01 Adj. R-Square=9.92990E-01 # of Data Points=643
SS=4.28360E+04 Degrees of Freedom=631



Fitting Results

Peak Index	Peak Type	Area Intg	Area IntgP	Center Grvty	Max Height	FWHM
1	Lorentz	1224.45579	6.29193	402.94973	51.79138	16.18129
2	Lorentz	7124.78256	36.61107	449.34427	99.46514	54.84704
3	Lorentz	5209.03045	26.76688	480.04365	339.0889	10.11773
4	Lorentz	5902.4625	30.33012	490.90891	156.28895	28.49933